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MALADIES CONTAGIEUSES.

Lettre du Président du Conseil.

Board of Health, Guernsey,
May 4th, 1900.

SIR,

I have the honour to present the First Annual Report of the Medical Officer of Health, for the year 1899. This Report was approved by the Board of Health at its last meeting, and it was resolved that, with your permission, it should be printed as an Appendix to the Billet d'État, and that 100 copies, in addition to the number required for the Billet, should be struck off, partly for distribution to the Local Government Boards of England and Scotland and to other Public Health Bodies, such as the Health Boards of the adjacent counties of England, and partly for sale to the public.

The Report, I venture to think, will be found to include some valuable vital statistics, which will not only be instructive, but which will be found useful by Medical Practitioners and by the Public generally.

I have, &c., &c.,

H. LE COCQ,
President, Board of Health.

To T. Godfrey Carey, Esq.,
President of the States.

Lettre de l'Officier de Santé.

Health Office, April, 1900.

The Members of the Board of Health.

GENTLEMEN,

In handing to you the Report for the year 1899, I wish to make a few remarks regarding its want of completeness.

In the first place, as there is no system of Registration of the Causes of Death by qualified Medical Practitioners, the statistics regarding these are so
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imperfect that they can only be used as rough indications and not as trustworthy guides.

In the second place, the Registers of Births and Deaths have never been summarized, and to do this thoroughly is a matter of great work and much time, while the results in view of the preceding remarks would be of very doubtful utility.

The only trustworthy published statistics relating to Guernsey which exist are the Census Returns.

What I have done personally is to extract :

- (1) The number of births and deaths for the last 20 years.
- (2) The ages of all who died between the years 1887 and 1898 and
- (3) The causes of death in so far as they relate to Infectious Disease.

Special attention has been paid to the Infantile mortality, as in this the evil effects of insanitary conditions are largely seen, and as its amount, apart from its ascribed causes, is a figure of great importance, a few tables of general interest with regard to Guernsey are added.

I have, &c., &c.,

JOHN BROWNLEE,
M.D., D.P.H.

RAPPORT.

First Annual Report of the Medical Officer of Health to the Board of Health of Guernsey, April, 1900.

SUMMARY OF THE SANITARY PROGRESS IN 1899.

In the first place it will perhaps be better to give a brief resumé of the chief alterations which have taken place in the sanitary administration of the Island during the year 1899.

The prevalence of Diphtheria during the previous years led in January to the appointment of a Committee of the Royal Court, for the purpose of considering the measures necessary to combat the disease.

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This Committee reported to the States, among other matters, that a Medical Officer of Health should be appointed for the Island. On March 29th the States considered the Report of the Committee and sanctioned the appointment recommended. This appointment necessitated some change in the Ordinance relating to infectious diseases, which was made at the succeeding Chief Pleas.

During the month of April a laboratory, of which a fuller account is given elsewhere, was fitted up at the expense of about £100.

In the month of May the Castel Hospital authorities were approached and agreed to lend their Isolation Hospital for a period of six months to the Court Sanitation Committee, with permission to admit cases of infectious disease from all classes, whether occurring in the town or the country.

Immediately thereafter this Hospital was opened to receive cases of scarlet fever.

Unforeseen difficulties with regard to the payment for persons removed to the Hospital having arisen, the States considered the matter in July and determined to assume the responsibility for the expense of the isolation and maintenance in Hospital of all cases not chargeable to the parishes. At the Chief Pleas in October, some further alterations (of which the chief related to the simplification of the procedure to be adopted for voluntary removal to the Hospital) were made in the Ordinance relating to Infectious Disease. In November the Castel Isolation Hospital was found insufficient to accommodate the cases of scarlet fever. The Court Sanitation Committee approached the Town Hospital authorities with a view to lending wards for the purpose of isolation of infectious patients. These they immediately placed at the Committee's disposal.

In the autumn, the Committee of the Royal Court arranged a course of lectures, with the object of popularising and extending the general knowledge of matters relating to Public Health. The authorities of the Guille-Allès Library very kindly placed their hall at the disposal of the Committee and Mr. Pitts gave much courteous assistance. Six lectures were delivered in the months of November and January. They were given by Dr. Aikman, Dr. Robinson, Mr. Collenette, Mr. Nickolls and the Medical Officer of Health.

Probably the most important matter of all those noted in this resumé remains to be mentioned, and that is the determination of the States on December 29th to form a Board of Health for the Island. This Board of Health, whose work now begins, was constituted as follows :—

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General Le Cocq, Chairman; Jurat Ozanne, Rev. H. W. Brock, and Messrs. Valpied, Collenette, J. W. Dorey, Collas and Foote, with the Supervisor as ex-officio member.

POPULATION OF GUERNSEY.

The exact population of Guernsey for the middle of the year 1899 is difficult to gauge accurately, as it is now eight years since a census enumeration of the population has been taken. Calculating the population on the basis of the rate of increase between 1881 and 1891, we obtain as the civil population, 37,381. By a return, kindly given me by Colonel Bell, C.B., Government Secretary, there were 524 soldiers in the Island on the 1st of July. The total population may thus be estimated at 37,905.

As there is no return of the number of inhabited houses for the years since the census in Guernsey, it is impossible to check this result by a comparison obtained on the basis of the average number of persons per house, as obtained in the census of 1891.

NATURAL INCREASE—IMMIGRATION—EMIGRATION.

The number of births from 1881 to 1891 in Guernsey, was 10,013 and the number of deaths 6,617, showing a *natural* increase of the population of 3,396. The *actual* increase during the same time was 2,636. A consideration of these figures shows that, as the natural increase is in considerable excess of the actual increase, the emigration from the Island during the 10 years was in excess of the immigration by 760. This is in part accounted for by the fact that there was a larger number of soldiers in the Island on the former occasion than on the latter by 123, but this is only a small proportion of the total.

In 1881, the population of persons of foreign birth amounted to 4,942, and in 1891 to 6,318, showing an increase of 1,376, which must of necessity be composed wholly of immigrants. Adding to this the excess of natural increase, we find that the number of emigrants during the ten years was approximately equal to 2,013, or about 200 persons a year. In the years 1891-1899 there have been 9,095 births and 5,326 deaths, leaving a natural increase of 3,769. The estimated actual increase during the same time is 2,585, which bears approximately the same ratio to the natural increase as obtained between the years 1881-1891.

DEATHS—ALL CAUSES.

671 deaths have been registered throughout the Island during the year 1899, which corresponds on the estimated population to a death rate of 17·7. Guernsey has a large proportion of persons of advanced age among whom the

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death rate is naturally high. Taking this into consideration and making the necessary correction, the true death rate is found to be 16·5. The death rates of the individual parishes during the year cannot be given as the census enumeration is so long past, and as, with the development of the greenhouse industry in the Island, a marked re-arrangement of the population has probably taken place. The indications are rather in favour of the view that increase of population has affected the town slightly but the country largely.

TABLE I.—GENERAL STATISTICS.

Year.	Estimated Population.	Births.	Deaths.	Birth Rate.	Death Rate.
1881.....	32,671	930	590	28·5	18·0
1882.....	32,918	934	595	28·4	18·0
1883.....	33,207	968	665	29·1	19·9
1884.....	33,447	1,022	719	30·5	21·2
1885.....	33,691	988	675	29·3	20·0
1886.....	33,987	972	710	28·6	20·8
1887.....	34,236	1,047	585	30·5	17·9
1888.....	34,488	996	568	28·8	16·4
1889.....	34,743	1,048	672	29·1	19·4
1890.....	35,020	1,042	770	29·7	21·9
1891.....	35,320	1,065	677	30·1	19·2
1892.....	35,634	1,088	669	30·5	18·7
1893.....	35,949	1,157	694	32·1	19·3
1894.....	36,268	1,087	625	30·0	17·2
1895.....	36,589	1,114	712	30·4	19·4
1896.....	36,913	1,243	546	36·6	14·8
1897.....	37,242	1,152	704	30·9	18·9
1898.....	37,572	1,161	700	30·9	18·6
1899.....	37,905	1,121	671	29·5	17·9

TABLE II.—PARISH STATISTICS.

Mean Population, Total Births, Total Deaths, Average Birth Rates and
Average Death Rates for each Parish in Guernsey.

TEN YEARS.—1881-1891.

Parish.	Mean Population.	Births.	Deaths.	Birth Rates.	Death Rates.
St. Peter-Port	16,833	4,615	3,366	27·42	19·99
St. Sampson's	4,164	1,412	674	33·91	16·18
Vale	3,712	1,289	673	34·72	18·13
Câtel	2,316	665	566	28·71	24·43
St. Saviour's	900	231	211	25·66	23·44
St. Pierre-du-Bois	1,246	434	254	34·83	20·38
Torteval	413	114	87	27·60	21·06
Forest	632	171	138	27·21	21·83
St. Martin's.....	2,485	738	450	29·69	18·11
St. Andrew's	1,222	344	198	28·15	16·20

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DENSITY OF POPULATION.

The density of the population for the whole island has been steadily increasing during recent years. In 1871, it was 1·9 persons per acre ; in 1881, 2·05 ; in 1891, 2·2 ; and, by the estimated population, 2·35 for the middle of 1899. The increase in the parishes has been greatest in St. Sampson's, from 2·7 to 3·2 persons per acre. In St. Saviour's the density is least, there being only 1 person to every 2 acres. In the Town Parish the numbers of persons per acre is on an average 12.

	Area in Statute acres.	Acres per person.	
		1881.	1891.
St. Peter-Port	1,499	·09	·08
St. Sampson's	1,435	·37	·31
Vale	2,088	·60	·53
St. Andrew's	1,203	1·05	·92
St. Martin's	1,799	·77	·67
Câtel	2,659	1·20	1·09
St. Saviour's	1,754	1·98	1·91
St. Pierre-du-Bois	1,662	1·41	1·24
Forest	1,090	1·82	1·63
Torteval	816	2·75	1·82

INCREASE OF POPULATION IN EACH PARISH, 1881-1891.

The details of Population are exhibited in the accompanying Table, from which it will be seen that the Town remained practically stationary in population in these ten years, and that the chief increase in point of numbers took place in the parishes of the Vale and St. Sampson's, which was probably largely due to the extension of the greenhouse industry and probably consisted of immigration of healthy adults, a fact which the comparatively low death rate of St. Sampson's and the Vale bears out. Torteval also gained proportionately, but in actual numbers the increase was trifling.

INCREASE OF POPULATION IN EACH PARISH.

Parish.	1881.				1891.				Civil Popula- tion. Increase per Cent.
	Civil.	Military.	Harbour and Institutions.	Total.	Civil.	Military.	Harbour and Institutions.	Total.	
St. Peter-Port ...	15,653	654	351	16,658	16,232	551	225	17,008	3
St. Sampson's....	3,624	—	156	3,780	4,455	38	56	4,549	22
Vale	3,438	39	—	3,477	3,934	13	—	3,947	14
Câtel	1,995	86	126	2,207	2,277	—	149	2,426	14
St. Andrew's	1,141	—	—	1,141	1,267	36	—	1,303	11
St. Martin's	2,278	35	—	2,313	2,632	27	—	2,659	15
St. Saviour's	884	—	—	884	916	—	—	916	3
St. Pierre-du-Bois	1,171	—	—	1,171	1,306	26	—	1,332	11
Forest	599	—	—	599	665	—	—	665	11
Torteval	379	—	—	379	448	—	—	448	18

GENERAL REMARKS ON THE DEATH RATE AT DIFFERENT AGES
IN GUERNSEY.

In the accompanying table will be seen arranged, for the purposes of comparison, the death rates at different ages in Guernsey and in a few other places. It will be seen from this table that Guernsey compares very favourably at all ages but those of childhood.

Were it reduced within normal limits at this period, the corrected death rate of the Island would not be more than 14, which is probably as low a rate as the Island could maintain in view of the increase of population which has taken place in recent years and which is still taking place.

DEATH RATES PER 1,000 LIVING AT DIFFERENT AGE PERIODS FOR
GUERNSEY AND OTHER PLACES, WITH CORRECTED DEATH RATE AT
ALL AGES.

Age Period.	Death Rates.				
	Guernsey.	Isle of Wight.	Dorsetshire.	Hampshire.	Sussex.
0-5	53· 2	32·05	35·65	42·22	39·77
5-10	3·06	3·78	3·76	4·12	4·16
10-15	1·72	2·46	2·43	2·39	2·49
15-20	3·87	4·48	3·89	4·10	3·55
20-25	4·94	6·49	5·35	5·74	4·76
25-35	7·35	8·63	6·31	7·78	6·51
35-45	10· 1	10·39	8·90	10·73	9·75
45-55	15· 0	12·43	12·44	14·94	14·02
55-65	23· 6	22·96	23·62	25·71	24·02
65-75	53· 5	50·22	53·48	55·46	52·42
75	133· 5	138·43	145·20	143·80	139·27
All ages	16· 5	14·28	14·24	16·0	14·94

INFANTILE MORTALITY IN GUERNSEY.

The number of infants dying under one year of age during the year 1899 was 152, which is equal to a death rate of 135 per 1,000 children born. The year has not been characterised by so high a death rate as some previous years, but, even as it stands, it is considerably more than it should be in an Island such as this. The infantile death rate of the Isle of Wight, for the ten years 1881 to 1891, was 89; for the Scilly Isles, 117; for the adjacent counties of England, Sussex, Hampshire, Dorsetshire respectively, 109, 112 and 96; but though this year's return compares not very unfavourably with

INFANTILE MORTALITY, 1899, WITH SOME OF THE ASCRIBED CAUSES.

Name of Parishes.	Deaths.		Deaths ascribed to Convulsions.		Deaths ascribed to Diarrhœa.		Infantile Death Rates per 1,000 born.		Both Sexes.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
St. Peter-Port	28	19	6	6	10	7	117	82·6	100·2
St. Sampson, Vale and Câtel..	38	32	14	7	5	6	188	150·9	169
St. Saviour, St. Pierre-du-Bois, Torteval and Forest.}	10	13	3	3	2	3	204	245	225
St. Martin and St. Andrew ..	7	5	2	1	4	2	106	75	88
Whole Island	83	69	25	17	21	18	148	122	135

INFECTIOUS DISEASES.

The year 1899 has been marked by the presence of more Infectious Disease in Guernsey than has existed for a very considerable period.

The predisposing causes are, to a certain extent, climatic. The year has been one of a series in which there has been a deficient rainfall, and, as often happens with such periods of prolonged relative drought, diphtheria has advanced, both in extent and severity. Another factor of considerable importance is the increasing density of the population of the Island, and with it the increased danger of pollution of the water supplies; while the long freedom from infectious disease has probably rendered the population more generally susceptible.

But a large factor in the spread of the disease has been the very inefficient isolation practised. In many places no attempt is made to observe the ordinary precautions, and especially with regard to scarlet fever the carelessness has been most culpable. With a rural population, who largely disbelieve both in infectious disease itself as well as in the possibility of combating it, removal hospital offers the only guarantee that isolation will be effective.

Infectious disease has been introduced into the Island in four instances during the past year, scarlet fever three times, and diphtheria once.

DIPHTHERIA.

During the year, there have been 121 cases of diphtheria as against 122 notified in 1898, and 35 in 1897.

Notification of diphtheria has been in force since 1895, and all information before that date comes solely from the returns of deaths. During the years 1887 to 1893 inclusive, 9 deaths are registered as due to diphtheria, 26 to croup, 3 to IV.—1900.

laryngitis and 4 to ulcerated sore throat. The year 1894 was marked by an outburst of diphtheria in St. Martin's, in connection with one of the schools: which must have been of malignant type. 14 deaths resulted, 7 were registered as diphtheria, 6 as croup (though there are no deaths registered from that disease from any other part of the island during that year) and one, as membranous croup.

In the five years 1895 to 1899, in the death register, 52 deaths are ascribed to diphtheria, 7 to croup, 3 to laryngitis and 7 to ulcerated sore throat. The deaths among notified cases of diphtheria amount to 59, showing a loss on registration of 7 persons. During the year 1899 there has been 1 death ascribed to ulcerated sore throat, occurring in a child of five, whose name is not among the cases notified as diphtheria. The statistics of diphtheria during the year exhibit some interesting conclusions. Out of 43 cases occurring in the town, only 1 died, while out of 78 cases in the country, 22 died, being a death rate of 30 per cent. as compared with 2·3 in the Town. As regards fatal cases occurring in the country the information is not complete as to the period at which a doctor was called in, but in the majority of these cases, it was not until the fourth day of illness, a period at which anti-toxin is given at a great disadvantage.

In 1898 Torteval and St. Peter's-in-the-Wood were chiefly affected, and it is noticeable (as is not unusual with diphtheria) that these parishes almost wholly escaped during 1899.

The country, on the whole, has suffered much more severely than the town, for in 1898 the attack rate, per unit of population, was $2\frac{1}{2}$ times that of the town, and in 1899 nearly twice.

The Castel Parish has suffered most severely this year. A series of cases occurred in connection with one of the Castel Schools—les Eturs,—where the surroundings are very insanitary. The dates on which the cases were notified are as follows:—April 21, April 30, June 7, June 9, Sept. 11, Sept. 16, Nov. 7. The secondary cases from these were certainly three in number and probably more.

Four cases of diphtheria were isolated in the Castel Hospital during the month of August, of whom 2 died, but this is only a small fraction of the number whose home surroundings were so bad as to render anything but a pretence of isolation possible.

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DIPHThERIA CASES NOTIFIED DURING THE YEAR 1899 AND THE
NUMBER OF DEATHS.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total.
St. Peter-Port	6	6	2	..	2	3	5	3	..	5	6	5	43
St. Sampson's	1	..	..	..	1	4	7	4	..	1	..	..	18
Vale	..	..	..	1	2	5	1	..	1	..	..	..	10
Câtel	2	..	..	3	..	6	1	..	7	6	2	..	27
St. Saviour's	..	..	..	..	1	..	..	..	..	1	..	..	2
St. Pierre-du-Bois ..	1	..	..	1	1	..	..	..	..	..	1	..	4
Torteval	..	..	..	..	..	..	..	..	..	..	..	..	..
Forest	..	..	..	..	..	..	..	..	..	..	..	1	1
St. Martin's	8	..	..	4	..	..	2	1	..	..	..	1	16
St. Andrew's	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	18	6	2	9	7	18	16	8	8	13	9	7	121
Deaths	1	..	..	5	3	4	3	3	2	..	1	1	23

NOTE.—Of the deaths only one case belonged to the Town.

NUMBER OF DEATHS FROM DIPHThERIA, CROUP, ETC.,
1887-1899.

	Diphtheria	Membranous Croup.	Croup.	Laryngitis.	Ulcerated Sore Throat.	Total.
1887	..	..	4	..	..	4
1888	3	..	6	1	..	10
1889	1	..	7	1	..	9
1890	1	..	2	..	1	4
1891	1	..	2	..	..	3
1892	2	..	2	1	2	7
1893	1	..	3	..	1	5
1894	7	1	6	..	..	14
1895	4	..	4	..	..	8
1896	2	..	..	..	1	3
1897	12	..	2	1	4	19
1898	11	..	..	2	1	14
1899	23	..	..	1	1	25

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SCARLET FEVER.

Scarlet fever has more marked seasonal proclivities than diphtheria, and its prevalence in the island has fairly well conformed to the usual distribution.

Measles was rather prevalent at the beginning of 1899, and I strongly suspect that scarlet fever gained its footing under the cover of the lighter disease. It does not seem ever to have been prevalent in the island during the 12 previous years.

The epidemic began in a very insidious manner. The early cases were very mild and appeared sporadically. The first were at St. Sampson's and occurred in April. One occurred in the town in May and in June two in the Vale. One of these was then desquamating—she was said to have had measles three weeks previously. The Vale cases were removed to Hospital. In July a child was found in the Vale Wesleyan School, copiously peeling; she was also moved to Hospital.

These facts alone would, if there no others, lead to the belief that a large part of the subsequent epidemic was due to the missing of cases, but a like story can be told in the town. A child played outside for a fortnight after an attack of scarlet fever in the Grand Bouët, and during the acute attack she was taken in a tramway car by her mother to a chemist's to be prescribed for. He pronounced it a heat rash and gave a bottle of medicine. One or two other missed cases came afterwards to my knowledge, one in St. Martin's and one in St. Peter-Port.

SCHOOL INFECTIONS.

The only schools which showed evidence of school infection were the British and Foreign (Girls') and a private school in Hauteville. From the former nine cases were notified as occurring between October 22nd and November 10th. The source of mischief could not be traced, but the total number of cases was few and gave no reason for alarm. The school was closed on November 10th and no more cases occurred, which is sufficient proof that the infection was already spent. The private school already referred to was, to my mind, much more seriously involved, and although it was not closed, the infection ceased at the same time.

The type of the disease has varied. Among natives I have hardly seen a severe case, but among persons of English or foreign extraction, it has frequently been of great severity, and among these, much the fewest in number, two deaths occurred.

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SCARLET FEVER.

CASES NOTIFIED.

	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
St. Peter-Port	..	1	4	1	7	4	16	37	13	83
St. Sampson's.....	4	..	1	..	1	..	..	1	1	8
Vale	..	..	2	1	..	..	..	1	1	5
Câtel	..	..	..	..	..	..	..	6	..	6
St. Saviour's	..	..	..	..	..	..	..	6	1	7
St. Pierre-du-Bois.....	..	..	..	..	..	..	1	..	..	1
Torteval	..	..	..	..	..	..	..	..	..	..
Forest	..	..	..	..	..	..	..	1	..	1
St. Martin's	..	..	2	..	1	..	2	..	..	5
St. Andrew's	..	..	..	..	..	..	..	1	..	1
Total	4	1	9	2	9	4	19	53	16	171

Only two deaths occurred from scarlet fever during the year.

ENTERIC FEVER.

During the year eleven cases of enteric fever have been notified, which fall into three groups. In one group, in the earlier part of the summer, all the sufferers seem to have had association with a small part of the Rohais; and in the second, with a most insanitary part of St. Sampson's Parish, called Woodbury's Yard. In each of these groups one death occurred.

At the end of the year, in December, two cases occurred in Doyle Road; both were mild. At the same time there was a third case, possibly of enteric, which ended fatally. No connection could be traced between these cases and those of either of the preceding groups.

MEASLES.

Measles was epidemic in the earlier part of the year, and caused very nearly as many deaths as diphtheria. As usual it claimed its victims among the very young, fourteen of the nineteen deaths occurring under the age of two years. Measles is a disease which is popularly regarded with equanimity, but it is one of the most fatal of infantile diseases; one case of scarlet fever occasions more perturbation than ten of measles, though measles annually claims twice the number of victims.

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DIARRHOEAL DISEASES.

During the year the most fatal of zymotic diseases has been diarrhœa. This disease, which is far the most common outcome of insanitary conditions, such as are produced when the soil is polluted with organic matter, has been very fatal during 1899; accounting altogether for forty deaths, or, in other words, as many as are produced by all the other zymotic diseases put together.

The victims as usual were chiefly children. The death rate was the same in the country as the town. With regard specially to those deaths which occurred under one year, and which constitute the great bulk of the diarrhœa mortality, the infantile death rate for the town was 36·2 per 1,000, and that for the country 35·8. Of the total infantile mortality for the year it constitutes 28 per cent.

NUMBER OF DEATHS FROM DIARRHOEAL DISEASES, 1887-1899.

A under 1 year; B from 1 to 5 years; C over 5 years.

	St. Peter-Port.			St. Sampson's, Vale, and Câtel.			St. Saviour's, St. Pierre- du-Bois, Torteval, and Forest.			St. Martin's and St. Andrew's.			Total.
	A	B	C	A	B	C	A	B	C	A	B	C	
	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	
1887..	9 4	1 0	1 4	3 2	0 0	0 0	0 0	0 0	0 1	0 0	0 0	0 1	26
1888..	2 0	1 0	0 0	1 0	0 0	1 1	0 0	0 0	0 0	0 0	0 0	0 0	6
1889..	4 1	0 0	0 2	1 4	0 0	1 0	0 0	0 0	0 0	0 0	0 0	1 0	14
1890..	1 0	3 1	0 1	0 1	0 0	1 0	0 0	0 0	0 0	0 0	0 0	0 0	8
1891..	1 0	0 0	0 1	1 0	0 0	0 0	0 0	0 0	0 0	1 0	0 0	0 0	4
1892..	6 3	0 0	0 2	4 2	1 0	1 0	0 1	0 0	0 0	1 0	0 0	0 0	21
1893..	20 9	1 0	0 2	7 3	1 0	1 0	0 1	0 0	0 0	3 1	0 0	0 0	49
1894..	1 4	0 0	0 1	1 0	0 0	0 0	1 0	0 0	0 0	0 1	0 0	0 0	9
1895..	10 6	1 0	0 0	10 8	2 0	0 0	0 0	0 0	0 0	4 0	0 0	0 0	41
1896..	2 2	0 0	0 0	2 0	0 0	0 1	0 1	0 0	0 0	0 0	0 0	0 0	8
1897..	6 1	0 0	0 0	4 4	1 0	0 0	0 0	0 0	0 0	0 1	0 0	0 0	17
1898..	9 5	2 0	1 2	8 5	1 0	0 0	0 3	0 0	0 0	3 1	0 1	0 0	41
1899..	10 7	0 0	0 0	5 6	1 0	0 0	2 3	0 0	0 0	4 2	0 0	0 0	40

TUBERCULOUS DISEASES.

The lack of medical registration of the cause of death in Guernsey makes it rather difficult to ascertain with anything approaching to accuracy the amount of tuberculous disease in the Island.

IV.—1900.

The results here discussed have been based on the returns at the Greffe, and the figures refer solely to those deaths which are definitely ascribed to phthisis or consumption, and do not include a large number of others, especially among young adults, which are registered as due to "decline." That a considerable number of these are, in reality, deaths due to tuberculous affections can admit of no doubt, but as phthisis is for the most part a technical term used by medical men, and as consumption is a term generally well understood, it is consequently probable that the deaths thus registered may be quoted as undoubtedly belonging to the category considered. I have chosen to restrict my figures within these limits, rather than expose them to unnecessary cavil, on the ground of the inclusion of deaths, for which the sole authority is the caprice of a relative.

Of the total deaths from all causes belonging to the following age periods, the deaths from, or ascribed to, phthisis, constitute a large proportion.

Age period. Years.	Percentage of Deaths from Phthisis to total Deaths.
10-15	25 per cent.
15-20	44 „ „
20-25	45 „ „
25-35	38 „ „

Tuberculosis in only one of its manifestations accounts for 11 deaths out of every 100 occurring in the Island among persons over 5 years of age.

I think the time is ripe for taking action to limit the spread of the disease. In England and Scotland, and in many places on the Continent, some regulations are in force with this view. Voluntary notification to the Medical Officer of Health on the part of the Medical Attendants is not unusual, and the corollary of disinfection of the premises inhabited by persons suffering from phthisis, where these cannot afford to carry out such measures on their own behalf, has been acted upon in some places for a considerable time.

The great difficulty in combating tubercle as an infectious disease is its chronicity. In the more acute forms of infectious disease, *e.g.*, small pox, the infectious period is quickly passed, but with tubercle it is different. A person may recover and relapse, the total illness having a duration possibly of twenty or thirty years, during all which time, he is, at intervals, a menace to the health of his neighbours. Comparatively simple precautions, however, if carried out, are able to immensely lessen the possibility of the contagion being disseminated.

HOSPITALS.

One of the great drawbacks in fighting infectious diseases in Guernsey hitherto has been the lack of hospital accommodation. At first there was even a great difficulty in removing people to hospital from the point of view of finance, but after this was overcome by the resolution of the States, such measures as were necessary could only be enforced in a limited manner, and often after vexatious delay. The accommodation was, after a little, taxed to its uttermost, and the hospital was deficient in due provision for the staff necessary for its working. The town hospital was opened as a relief, towards the end of November, and both Town and Country were open at the end of the year. The Country Hospital, in the first instance, was opened for scarlet fever, then for diphtheria, and again for scarlet fever.

The first cases were admitted on the ground of emergency. When these were convalescent the Hospital was disinfected and a case of diphtheria having occurred in one of the hotels, the Hospital was re-opened for that disease. Several children were removed from insanitary localities, but though an immediate danger was thereby temporarily relieved, the rise of scarlet fever into epidemic form made it essential that the more extensive evil should receive the bulk of the attention and the lesser wait for a more convenient season.

In all 29 cases of infectious disease were isolated in the C  tel Hospital, 4 of these were diphtheria and the remaining 25 scarlatina. Five cases of scarlatina were isolated in the Town Hospital.

We have thus two staffs in contemporary use for the same disease in two different districts of the Island, a procedure inefficient and extravagant.

In a place of the size of Guernsey it is quite unnecessary that the cases occurring in the Town and Country should be treated separately.

OFFENSIVE TRADES.

The number of offensive trades in Guernsey is small and this has probably conduced to a neglect of their supervision. There is a knackery however on the Banques which I was requested by the Constable of St. Sampson's Parish to visit and report upon. The methods pursued at this knackery are such as are calculated to produce the maximum of nuisance. I think that the matter is of sufficient importance to demand a special report with the view to the regulation of such trades as soap boiling, manure manufacturing, &c., by Ordinance of the Royal Court.

THE LABORATORY.

The administration of Public Health demands a fully equipped laboratory. It is only by this means that rapid diagnosis can be made in many cases of

infectious disease, such as diphtheria and enteric fever. The detection of the tubercle bacillus in milk also requires special apparatus. The laboratory is equipped with the usual benches and tables and suitable gas and water fittings.

The bacteriological apparatus consists of an incubator, sterilizers, steam and hot-air, centrifugal machine, section cutter, hot-air oven, &c.; and the chemical appliances include a chemical balance, a platinum crucible, condensers, flasks, burettes, &c.

The microscope was supplied by Zeiss, of Jena, and has powers of magnification up to about 1,000 diameters.

In all, the cost of equipping the laboratory amounted to about £70, and the microscope to £30 in addition.

SUMMARY.

The chief sources of danger to the public health in Guernsey consist of the unsatisfactory construction of the closets, pigstyes, &c., of the proximity of wells to such sources of pollution, and the freedom with which surface water is permitted to run into them.

There is no doubt that many wells are polluted which might be perfectly pure, if a reasonable amount of care had been exercised in their construction. The pollution, fortunately, has never been of a definitely specific nature during my experience in Guernsey, but the large amount of diarrhœa in the Island, and the widespread nature of diphtheria outbreaks, point strongly to the fact that there is a lessening of vitality, especially in children, which predisposes strongly to attacks of more serious disease. Dirty water when used to cleanse milk utensils cannot leave them in a clean state; and milk which is in itself a complete natural food affords to the bacillus as well as to man a suitable nutriment. That milk is one of the chief means of spreading diarrhœa is evidenced by the fact that infants under a year form the chief victims of the attack. There is a great necessity that some ordinances should be passed regulating the construction of receptacles of refuse, their proximity to wells, and their periods of cleansing, the structure of wells used for drinking water, or for water for domestic purposes, the inspection of dairies and the registration of milk shops.

Until some such legal measures are taken, it will be almost impossible to effect improvement in the sanitation of Guernsey, for it must be perfectly evident, with the legal disabilities at present in force, that a prosecution is so difficult a matter as to preclude any recourse to it, except in some glaring instance of infraction of the law.



